

# Texas Risk Factor Report



Texas Department of Health

## ARTHRITIS 1999 Survey Data

### Introduction

“Arthritis,” which literally means joint inflammation, encompasses a large family of over 100 rheumatic diseases. These disorders can affect not only the joints but other connective tissues of the body including important supporting structures such as muscles, tendons, and ligaments, as well as the protective coverings of some internal organs.<sup>1</sup> “Rheumatism” is derived from the Greek word

*rheumatismos*, in which it was thought that mucus was an evil humor that flowed from the brain to the joints and other portions of the body, thereby producing pain.<sup>2</sup>

Although arthritis cripples a large number of persons each year, it kills relatively few. There is no other group of diseases which causes so much suffering by so many for so long. Because of the tendency to cripple without killing, arthritis and rheumatism are very important chronic diseases from the standpoint of social and economic magnitude.<sup>2</sup>

The estimated number of persons with arthritis and the prevalence rate of arthritis have increased since 1985, when 35 million persons had arthritis (14.5%). In 1990, an estimated 15.0% of the U.S. population had arthritis and 2.8% of the U.S. population reported arthritis as a major or contributing cause of activity limitation.<sup>3</sup> Arthritis and other rheumatic conditions were the leading causes of disability in the United States affecting 42.7 million people and costing \$65 billion in 1992.<sup>4</sup> By 2020, the estimated number of persons with arthritis is projected to increase by 57%, and activity limitation associated with arthritis by 66%.<sup>3</sup> In 2020, self-reported arthritis will affect an estimated 49.7 million whites, 7.0 million African-Americans, 5.1 million Hispanics, 1.6 million Asian/Pacific Islanders, and 442,000 American Indians/Alaskan Natives. Activity limitation attributable to arthritis will affect an estimated 9.3 million whites, 1.8 million African-Americans, 1.2 million Hispanics, 264,000 Asian/Pacific Islanders, and 115,000 American Indians/Alaskan Natives.<sup>5</sup>

#### Highlights of this Issue

\* **An estimated 3,077,790 (21.4%) Texans aged 18 and older self-reported arthritis during 1999.** Among persons who had chronic joint symptoms, 1.5 million (31.3%) Texas residents reported their condition as a cause of activity limitation.

\* **Prevalence of arthritis increased with increasing age of respondents.** Of persons who had chronic joint symptoms, more than five out of every ten respondents aged 65 and older (54.8%) had been told by their doctors that they had arthritis. The proportion of activity limitation associated with arthritis was highest among persons aged 65 and older (41.9%).

\* **The proportion of reporting having arthritis was higher for women than for men.** An estimated 1.8 million (25.7%) women reported arthritis compared to 1.1 million (17.0%) men.

\* **Risk for arthritis by race was highest among non-Hispanic whites.** The prevalence rates for arthritis were significantly higher for non-Hispanic whites (25.6%) and for African-Americans (21.2%) than for Hispanics (14.5%), and for Other races (13.5%).

Nationally from 1989 through 1991, arthritis was the most common self-reported chronic condition among whites, the second most common condition among American Indians/Alaskan Natives and Hispanics, the third most common condition among African-Americans, and the fourth most common condition among Asian/Pacific Islanders.<sup>5</sup>

Data presented in this report are from the 1999 Behavioral Risk Factor Surveillance System (BRFSS). The Texas BRFSS is an ongoing, random-digit dialed monthly telephone survey that collects self-reported health related data from a sample of noninstitutionalized Texas residents aged 18 and older and is sponsored by the Texas Department of Health, Bureau of Disease, Injury, and Tobacco Prevention. A total of 6 questions related to arthritis were asked in 1999. The 1999 BRFSS survey data were analyzed to examine various factors associated with arthritis among Texas residents.

## Methods

The Texas 1999 survey data were collected by the Texas Department of Health with 5,000 randomly selected Texas residents aged 18 years and older.

All BRFSS data are weighted to reflect the age, race, and sex distribution in Texas, as well as the probability of selection, such that each respondent effectively represents a specific number of Texans in his/her given socio-demographic group.

Prevalences that reached statistical significance are addressed below, and significance is determined in the model as if all other variables were equal.

Analyses were performed using SUDAAN<sup>6</sup> and SPSS version 9.<sup>7</sup> Results were weighted to account for the sex, race, and age distribution in Texas. By weighting the data, the responses from randomly selected Texas adults were adjusted to compensate for the over-representation or under-representation of various groups in the survey sample. Weights were adjusted for the number of telephone num-

bers per household, the number of adults in the household, and the demographic distribution of the survey sample. If the data were not weighted, it would be impossible to make projections from the sample to the general population.

Persons who had chronic joint symptoms were defined as the percentage of "Yes" responses to the questions, "During the past 12 months, have you had pain, aching, stiffness, or swelling in or around a joint?" and "Were these symptoms present on most days for at least one month?" Activity limitation attributable to chronic joint symptoms was defined as the percentage of "Yes" responses to the question, "Are you limited in any way in any activities because of joint symptoms?" Persons with arthritis were defined as the percentage of respondents who were told by their doctors that they had arthritis. Type of arthritis was determined by any answer to the question, "What type of arthritis did the doctor say you have?" Persons were considered to have current doctor treatment for their arthritis if they answered "Yes" to the question, "Are you currently being treated by a doctor for arthritis?" A current smoker was defined as persons who reported smoking at least 100 cigarettes in their lifetime, and smoked some or all of the past 30 days. Overweight and obese by body mass index (BMI) were calculated from self reported height and weight as the weight (Kg) over squared height (m). For this analysis, BMI was divided into two categories: Overweight (BMI equal or greater than 25 but less than 30), and obese (BMI greater than or equal to 30). Health care coverage was defined as the percentage of Texans not covered by a health care plan. Flu shot prevalence represents the number of respondents who reported that they had a flu shot during the past year. Pneumonia vaccine prevalence was defined as the percentage of respondents who ever had a pneumonia vaccination. Health status was defined as percentages of respondents who answered "Fair" or "Poor" to the question, "Would you say that your health in general is: Excellent? Very good? Good? Fair? or Poor?" Social context was defined as the percentage of respondents who answered "none" to the question "How many close friends would help you when you really needed it?"

## Age

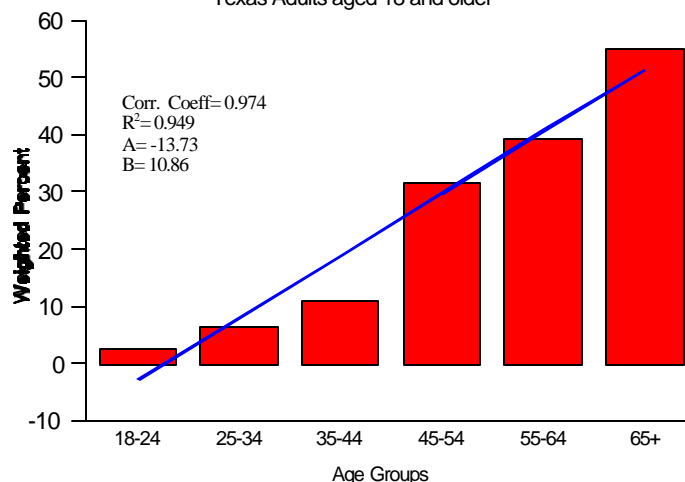
Twenty one percent of adult respondents reported that they had been told that they had arthritis in 1999. Prevalence of arthritis increased with increasing age of respondents (Figure 1). When asked if they had pain, aching, stiffness or swelling in or around a joint, 34.6% of Texans said "Yes." The prevalence of chronic joint symptoms was most prevalent among respondents aged 65 and older (51.3%), with the proportion of persons

Table 1	
Prevalence of Texans Who Had Been Told That They Had Arthritis 1999	
<b>Age</b>	%
18-24	2.7
25-34	6.4
35-44	10.9
45-54	31.5
55-64	39.4
65+	54.8
<b>Sex</b>	%
Male	17.0
Female	25.7
<b>Race</b>	%
White	25.6
African-American	21.2
Hispanic	14.5
Other	13.5

### Figure 1

Have you ever been told by a doctor you have arthritis by age?

Texas BRFSS 1999  
Texas Adults aged 18 and older



with chronic joint symptoms increasing with increasing age of respondents. Almost one-half of Texas residents aged 55 to 64 (46.3%) reported chronic joint symptoms, while only 21.6% of those aged 18 to 24 indicated the same chronic symptoms.

Of persons who had chronic joint symptoms, more than five out of every ten respondents aged 65 and older (54.8%) had been told by their doctors that they had arthritis compared to only 2.7% of respondents in the 18 to 24 age group (Table 1).

Among persons who had chronic joint symptoms, 31.3% (approximately 1.5 million adult Texans) reported their condition as a cause of activity limitation during 1999. In general, prevalence of activity limitation due to arthritis increased with increasing age of respondents. The proportion of activity limitation associated with arthritis ranged from a low of 21.7% for 18 to 24 years old to 41.9% for persons aged 65 and older.

Among persons with arthritis diagnosed by a doctor, 32.3% were being treated by a doctor for their arthritis and 43.3% indicated their type of arthritis as "Osteoarthritis."

## Sex

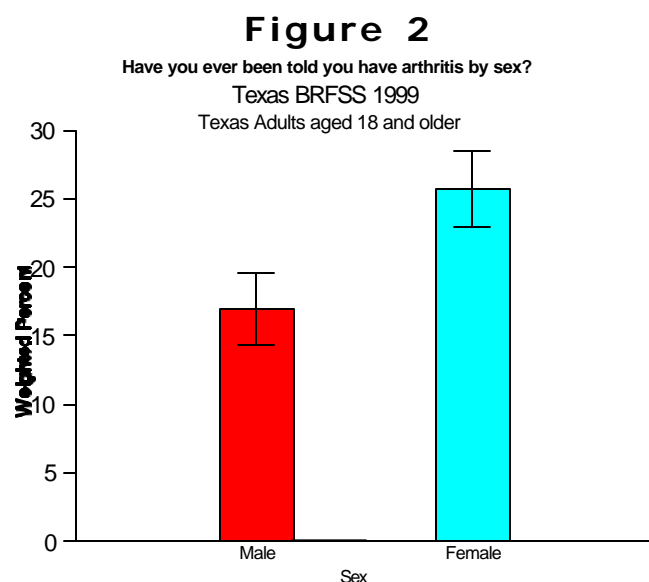
Females (37.0%) were more likely than males (32.0%) to report pain in or around their joints during the past 12 months in 1999 however, these differences were not statistically significant.

Similarly, the proportion of respondents who reported arthritis as a cause of limited activity was higher among women (36.1%) than among men (25.5%) (Table 2).

Approximately 1.8 million (25.7%) women are estimated to have been told they have arthritis compared to an estimated 1.1 million (17.0%) men during 1999 (Figure 2).

A greater proportion of females (36.9%) than males (25.0%) were being treated by a doctor for their arthritis. However, differences in sex-specific prevalence did not reach statistical significance.

Among the types of arthritis they had, women were most frequently told by their doctors osteoarthritis (49.3%), followed by rheumatoid arthritis (27.2%). Osteoarthritis was also the most common self-reported arthritis type for men (32.9%).



## Race

In 1999, about 35% of Texas adults aged 18 and older stated that they had pain in or around their joints. Whites (42.5%) were twice as likely as Hispanics (20.4%) to indicate arthritic pain within the past year. The prevalence rates for arthritis were significantly lower for Hispanics (14.5%), and for Other races (13.5%) than for non-Hispanic whites (25.6%), and for African-Americans (21.2%). The proportion of Texans with arthritis who reported that they had activity limitation due to arthritis was lowest among Hispanics (23.7%). The prevalence rates for activity limitation attributable to arthritis were similar for non-Hispanic whites (32.4%) and for African-Americans (33.4%), and for both groups were significantly lower than for Other races (56.1%).

**Table 2**  
Prevalence of Activity Limitation Attributable to Arthritis  
1999

Age	%
18-24	21.7
25-34	25.7
35-44	22.5
45-54	32.5
55-64	39.4
65+	41.9
<b>Sex</b>	<b>%</b>
Male	25.5
Female	36.1
<b>Race</b>	<b>%</b>
White	32.4
African-American	33.4
Hispanic	23.7
Other	56.1

## Health Behaviors and Arthritis

### \* smoking

Among persons diagnosed with arthritis by a doctor, an estimated 556,348 (18.1%) persons stated that they were current smokers. A significantly greater number of persons without arthritis reported being current smokers (25.6%).

### \* overweight

Of the estimated 2.2 million Texas adults aged 18 and older with arthritis, approximately 1.5 million (68%) are overweight. Only 43.9% of the persons with no history of arthritis in this study said they were not overweight, compared to 56.1% fell into the overweight category.

### \* obesity

Almost three-out of ten (27.8%) of adult Texans with arthritis indicated that they were obese based on self-reported heights and weights. Overall, the prevalence of obesity among persons with arthritis (27.8%) was significantly higher than for those persons without diagnosed arthritis (20.5%).

### \* access to health care

In the 1999 Texas BRFSS, 13.1% of respondents (approximately 403,662 adult Texans) with arthritis reported having no health care plan. Among respondents aged 18 and older, who reported having no arthritis, 25.7% were without a health care plan. The proportion of respondents who said cost of health care kept them from visiting a physician when they needed to were about the same between persons with arthritis (14.5%) and persons without arthritis (15.9%).

### \* immunizations

The proportion of respondents who had received an influenza shot in the past 12 months was higher among persons with arthritis (49.5%) than among persons without arthritis (25.2%). Almost one-third (32.2%) of Texans with arthritis reported ever having a pneumococcal vaccination, while 67.8% of respondents with arthritis stated that they had not received this preventive measure.

### \* health status

When asked to rate their general health, the majority of adult Texans with arthritis in the 1999 BRFSS reported that their general health was at least “good” (excellent, 8.8%; very good, 21.9%; good 32.9%). By comparison, the proportion of respondents without arthritis who categorized their health status as excellent were (23.7%), very good (32.9%), good (38.1%), fair (12.2%) and poor were (2.4%). These were somewhat different than the proportion of respondents with arthritis, though most did not reach statistical significance.

### \* social context

Among persons diagnosed with arthritis by a doctor, an estimated 186,937 (6.2%) persons stated that they did not have anyone who would help them when they really needed it. Similar to prevalence of persons with arthritis, the proportion of persons without arthritis who reported that they had no one to help them was 7.6% however, these differences were not statistically significant.

## Arthritis

Risk Factor	Sex		Age Groups						Race			
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	White	Afr.-Amr	Hispanic	Other
<b>Joint Pain<sup>1</sup></b>	32.0 (28.5-35.4)	37.0 (34.2-39.8)	21.6 (16.0-27.1)	24.1 (18.9-29.3)	31.2 (26.8-35.6)	42.1 (36.7-47.4)	46.3 (40.3-52.3)	51.3 (45.7-56.8)	42.5 (39.7-45.4)	33.7 (26.3-41.1)	20.4 (16.5-24.4)	26.1 (21.5-30.7)
<b>Symptoms<sup>2</sup></b>	49.6 (43.5-55.6)	56.1 (51.7-60.6)	39.1 (35.6-52.3)	35.9 (24.1-47.6)	51.1 (43.6-58.5)	57.3 (49.9-64.7)	57.8 (49.5-66.1)	66.6 (59.4-73.8)	53.3 (49.2-57.4)	46.2 (32.7-59.6)	56.8 (46.2-67.4)	48.2 (26.8-69.6)
<b>Activity Limitation<sup>3</sup></b>	25.5 (20.4-30.5)	36.1 (31.6-40.7)	21.7 (35.6-33.5)	25.7 (14.4-36.9)	22.5 (16.4-28.5)	32.5 (25.4-39.7)	39.4 (31.3-47.5)	41.9 (34.1-49.6)	32.4 (28.4-36.5)	33.4 (21.2-45.5)	23.7 (15.8-31.5)	56.1 (35.0-77.1)
<b>Arthritis<sup>4</sup></b>	17.0 (14.4-19.5)	25.7 (22.9-28.5)	2.7 (0.8-4.6)	6.4 (3.7-9.1)	10.9 (8.2-13.6)	31.5 (25.5-37.4)	39.4 (33.4-45.3)	54.8 (49.2-60.3)	25.6 (23.2-28.0)	21.2 (14.2-28.2)	14.5 (10.5-18.5)	13.5 (5.8-21.1)
<b>Treatment<sup>5</sup></b>	25.0 (18.1-31.8)	36.9 (30.1-43.7)	0 (0)	18.7 (4.5-32.8)	24.9 (13.2-36.6)	35.4 (21.7-49.1)	32.5 (23.2-41.9)	36.4 (29.4-43.5)	29.7 (25.1-34.4)	26.3 (12.4-40.2)	42.2 (26.4-57.9)	44.6 (15.4-73.9)

- 1 Had pain, aching, stiffness or swelling in or around a joint.
- 2 Among those with joint pain, had symptoms present on most days for at least one month.
- 3 Activities were limited in any way because of joint symptoms..
- 4 Told by a doctor that they had arthritis.
- 5 Among those told they had arthritis are currently being treated by a doctor for arthritis.

## References

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